

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A detector for a detection of electromagnetic radiation, said detector comprising:

at least one scintillator;  
at least one CMOS chip; and  
a ceramic basic element,

wherein a respective intermediate layer that is defined in respect of its gap width is arranged each time between the scintillator and the CMOS chip and between the CMOS chip and the ceramic basic element, and

wherein said intermediate layer contains at least two adhesives of different consistency and contained within separate portions, a first of said adhesives being a rapidly-curing adhesive to obtain a fast fixation of said gap width and a second of said adhesives being a low-viscosity adhesive to obtain a bubble-free intermediate layer, and spacers.

2. (Previously presented) The detector as claimed in claim 1, wherein the gap width of the intermediate layer is determined by quantities of the first adhesive and a plurality of spacers.

3. (Currently amended) The detector as claimed in ~~claims 1 or 2~~claim 1, wherein the first adhesive is a fast curing epoxy resin, cyanoacrylate or acrylate adhesive.

4. (Previously presented) The detector as claimed in claim 3, wherein at least some quantities of the first adhesive are applied directly to the surfaces of the CMOS chip and the ceramic basic element and that a plurality of spacers is arranged between the surfaces of the CMOS chip and the ceramic basic element.

5. (Previously presented) The detector as claimed in claim 4, wherein each spacer is a wire spacer.

6. (Previously presented) The detector as claimed in claim 3, wherein at least some quantities of the second adhesive are applied to the surface of the scintillator that faces the CMOS chip as well as to a plurality of bumps that are present on the CMOS chip.

7. (Previously presented) The detector as claimed in claim 1, wherein the second adhesive is a low-viscosity adhesive, notably on an epoxy resin basis.

8. (Previously presented) The detector as claimed in claim 1, wherein the ceramic basic element is based on an aluminum oxide.

9-11. (Canceled)

12. (Currently amended) An X-ray examination apparatus that includes at least one detector as claimed in claim 1 ~~or 2~~.

13. (Currently amended) A detector for detecting electromagnetic radiation, said detector comprising:

a ceramic basic element;

a CMOS chip; and

a first intermediate layer between said ceramic ~~basic~~ basic element and said CMOS chip, said first intermediate layer including a first spacer in contact with said ceramic basic element and said CMOS chip,

a first adhesive adhered to said ceramic basic element and said CMOS chip, said first adhesive being a rapidly-curing adhesive to obtain a fast fixation of ~~said~~ a gap width of the first intermediate layer, and

a second adhesive adhered to said ceramic basic element and said CMOS chip, said second adhesive being a low-viscosity adhesive to obtain a bubble-free intermediate layer, wherein the first adhesive and the second adhesive form separate portions of adhesive.

14. (Previously presented) The detector of claim 13, wherein said second adhesive is between and adhered to said first spacer and said first adhesive.

15. (Currently amended) The detector for detecting electromagnetic radiation of claim 13, further comprising:

a scintillator; and

a second intermediate layer between said CMOS chip and said scintillator, said second intermediate layer including

a second spacer in contact with said CMOS chip,

a third adhesive adhered to said second spacer and said scintillator, and

a fourth adhesive adhered to said CMOS chip, said scintillator, said second spacer and said third adhesive, wherein the third adhesive and the fourth adhesive form separate portions of adhesive.

16. (Previously presented) The detector of claim 15,

wherein said second intermediate layer further includes a third spacer in contact with said CMOS chip; and

wherein said fourth adhesive is between and adhered to said scintillator and said third spacer.

17. (New) The detector of claim 1, wherein the second of said adhesives has a refractive index greater than 1.5 and enables low-loss transmission of light in the wavelength range of 450 to 550 nm.

18. (New) The detector of claim 1, wherein a portion of the first adhesive is applied to at least a portion of the spacers.

19. (New) The detector of claim 18, wherein the portion of the first adhesive is applied to a surface of the portion of the spacers.

20. (New) The detector of claim 19, wherein the portion of the first adhesive is applied only to tips of the spacers in at least one of the respective intermediate layers.
21. (New) The detector of claim 1, wherein a portion of the first adhesive is applied without contacting at least a portion of the spacers.
22. (New) The detector of claim 1, wherein the portion of the first adhesive is applied as droplets.
23. (New) The detector of claim 22, wherein the droplets are applied to a droplet height that exceeds a height of spacers in the respective intermediate layer.